

Notice of Allowability

Application No.

09/986,801

Examiner

Joseph E. Avellino

Applicant(s)

CRAIK, RON

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment dated 1/21/06 and Interview dated 2/15/06.
2. ☒ The allowed claim(s) is/are 26-28,31-33,35 and 36.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☒ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 09/12/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date herewith.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Donald Tomkins on February 15, 2006.

The application has been amended as follows:

Claim 26 (currently amended): A method for verifying physical access by an inspection agent to a selected component of an aircraft and for storing related information on the selected aircraft component, said method comprising the steps of:

- (a) providing a memory button comprising a read-write memory chip sealed inside an armoured container, said memory chip having stored therein a unique and unalterable identification number, and said armoured container comprising contact means electrically connected to the memory chip;
- (b) associating the memory chip's unique identification number with the selected aircraft component;
- (c) permanently affixing the memory button to the selected aircraft component;
- (d) providing a portable computing device having a read-write memory and a user interface whereby a user may enter user-defined data and commands into said read-write memory;
- (e) providing a memory button probe in hard-wired electronic communication with the portable computing device, said memory button probe having contact means adapted for contacting engagement with the contact means of the memory button, so as to transfer data from the portable computing device to the memory button or from the memory button to the portable computing device;
- (f) associating a unique inspector code with a specific inspection agent;

Art Unit: 2143

- (g) gaining physical access to the memory button, while carrying both the portable computing device and the memory button probe;
- (h) by means of the user interface, entering the unique inspector code into the memory of the portable computing device;
- (i) bringing the contact means of the memory button probe into physical contact with the contact means of the memory button so as to record:
 - i.1 in the read-write memory of the memory chip, the unique inspector code, plus the date and time; and
 - i.2 in the memory of the portable computing device, the memory chip's unique identification number, plus the time and date;
- (j) performing a selected inspection or maintenance task on the aircraft component to which the memory button is affixed;
- (k) by means of the user interface, entering task performance information into the portable computing device relating to the completed performance of the selected inspection or maintenance task;
- (l) engaging the contact means of the memory button probe with the contact means of the memory button so as to electronically transmit a signal, corresponding to said task performance information, from the portable computing device to the memory button, and so as to store said task performance information on the memory button's read-write memory chip;
- (m) providing, at a location remote from the aircraft, a central computer having a database, said central computer being in electronic communication with the portable computing device; and

(n) transmitting a signal from the portable computing device to the central computer, so as to store said task performance information in said database;

wherein:

(j o) the aircraft has no onboard means for reading information stored in the memory button; and

(* p) steps (g), (h), ~~and (i)~~ (i), (j), (k), and (l) are performed by the specific inspection agent referred to in step ~~(f)~~ (f);

and wherein the database of the central computer stores technical information relating to the selected aircraft component, and wherein the method comprises the additional step of transmitting a signal from the portable computing device to the central computer, instructing the central computer to transmit, from the database to the portable computing device via the second data transfer link, selected technical information relating to the selected aircraft component.

Claim 27 (previously presented): The method of Claim 26 wherein the portable computing device is a laptop computer.

Claim 28 (previously presented): The method of Claim 26 wherein the portable computing device is a personal digital assistant.

Claims 29 and 30 (cancelled)

Claim 31 (currently amended): The method of Claim ~~30~~ 26 wherein the central computer is in electronic communication with the portable computing device by means of a wireless data transfer link.

Claim 32 (previously presented): The method of Claim 31 wherein the wireless data transfer link is a wireless connection through a computer network.

Art Unit: 2143

Claim 33 (previously presented): The method of Claim 31 wherein the wireless data transfer link is a connection through a telecommunications satellite system.

Claim 34 (cancelled)

Claim 35 (currently amended): The method of Claim ~~34~~ 26, comprising the additional step of transferring said technical information from the portable computing device to the memory button by engaging the contact means of the memory button probe with the contact means of the memory button contacting engagement of the memory button probe with the memory button.

Claim 36 (currently amended): The method of Claim ~~29~~ 26 wherein the memory button stores technical information relating to the selected aircraft component, and wherein the method comprises the additional step of downloading selected technical information from the memory button, for use in association with the selected inspection or maintenance task, by engaging the contact means of the memory button probe with the contact means of the memory button.

Drawings

2. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the drawing is done on a lined sheet of paper. Applicant is requested to provide drawings without lines present. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance: The prior art does not provide for, nor suggests providing for a memory button attached to an aircraft component which can store inspection data and technical manuals regarding the selected aircraft component. The method stores this information also in a central database which is accessible from the portable computing device to store inspection data. The memory button has a read-write memory chip and an unalterable ROM identifier which is associated with the aircraft component. The task performance data is stored in the database and the memory button. The technician can update the central database by transferring data from the memory buttons to the database via the computing device. The aircraft has no possible way to access the information stored in the ibuttons of the aircraft, resulting in the only way to access the information is via the memory button probe attached to the portable computing device. Prior art of record closest to the invention is Smith et al. (USPN 5,931,877) which discloses a central data warehouse to store inspection and manuals, however one of ordinary skill in the art would not be motivated to store this information on an ibutton permanently affixed to the aircraft component. The Flicker reference (USPN 6,101,433) discloses storing information in an ibutton regarding vehicle operation, however lacks the ability for the technician to store information on the ibutton. One would not be motivated to modify the system of Smith to store information on an ibutton, because no one would find it obvious to store this information in both a central database and also an ibutton on the aircraft

Art Unit: 2143

component. For these reasons, in conjunction with the other limitation of the independent claim, render this case in condition for allowance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A. Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

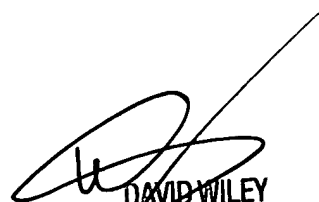

JEA

Application/Control Number: 09/986,801

Page 9

Art Unit: 2143

February 16, 2006



DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100